

The Relax in Pregnancy Project

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Background. Many women feel anxious or stressed during pregnancy. Stress, anxiety, and depression faced by women, increase the risk of both behavioural and biological problems for the baby. These can include a lower birth weight, Attention Deficit Hyperactivity Disorder (ADHD), and potential for depression later in life (O'Connor et al., 2002). This has been suggested to be due to the stress marker cortisol and its interference in brain development. Since medication such as antidepressants can cross the placenta and directly harm the child, these methods should be avoided, and non pharmacological methods should be used (O'Connor et al., 2005). Studies have shown that music is an effective therapy for reducing stress in patients before surgical treatments. Additionally, a study conducted by Ventura and associates (2012) found that stressed pregnant women exposed to music experienced the greatest reduction in cortisol levels alone as compared to the relaxation and the control groups.

Aim. The aim of this study was to determine whether listening to lullabies for about 20 minutes a day could reduce prenatal depression and anxiety levels, long term. Based on results from past studies, it was hypothesized that music would have the greatest effect in reducing prenatal anxiety and depression.

Method. Women first took online surveys that assessed their mood. Women were then assigned to one of two relaxation groups. One group listened to lullabies for about 20 minutes a day, while the other group relaxed, doing deep breathing exercises for the same amount of time. Surveys were taken once a month. The amount of time spent doing exercises was recorded, and their mood periodically assessed.

Results. In this study, the prenatal depression and anxiety levels as represented by the Edinburgh Postnatal Depression Scale and Spielberger State & Trait scores respectively, significantly reduced after 12 weeks of music listening. No significant reduction was found in the control groups.

Possible Applications or Implications. Although much needs to be explored, these findings encourage the exploration of music as an intervention in pregnant women, in order to prevent particular neuropsychological outcomes that may occur in the developing infant due to prenatal stress and anxiety.

Keywords: pregnancy, stress, neurodevelopment, music

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